Course Outcomes - M. Pharmacy PHARMACEUTICS

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| **Sl. No.** | **Name of the Program** | **Name of the Course** | **Course Outcome** |
| 1 | **M. Pharm.**  **I Year I Sem** | **ADVANCED PHYSICAL PHARMACEUTICS** | The students will learn particle size analysis method, solid dispersion, physics of tablets, polymer classification and its applications, student will also practice the stability calculations, shelf life calculations and accelerated stability studies. They also understand the rheology, absorption related to liquids and semi-solid dosage forms with advances. They also know the factors affectingthe dissolution and solubility in related to invitro/invivo correlations. |
| 2 | **MODERN PHARMACEUTICS – I** | Students shall explain the preformulation parameters, apply ICH guidelines, and  evaluate drug, drug excipients compatibility. Students also explain about formulation and  development, use of excipients in tablets, powders, capsules, micro-encapsules and coatingtechniques. They also learn and apply the statistical design in different formulations. |
| 3 | **APPLIED BIOPHARMACEUTICS AND PHARMACOKINETICS** | students will be able to express factors affecting the bioavailability and stability of  dosage form; they also learn the bioequivalence studies and protocols for bioequivalent studies. They  also evaluate the parameters for the disposition, absorption and Michaelis-Menton constants for nonlinear kinetics. |
| 4 | **MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES** | The appreciable knowledge will be gained by the students in the Modern  Analytical Techniques and can apply the theories in the Analysis of various bulk drugs and their formulations. The students will also be in a position to apply their knowledge in developing the new methods for the determination and validate the procedures |
| 5 | **PHARMACEUTICAL MANAGEMENT** | **Course Outcomes:**  These topics are useful for the students to know how to manage a pharma industry and itsvarious departments viz QA, QC, RA, Production etc.  Along with this it aids the students to develop leadership qualities, communication  &interpersonal skills, decisions making, motivation, organization &various managerial functions& professional skills required for a dynamic professional.  Management helps to understand the concept of managerial control, its levels &role, importancein pharma industry |

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| **Sl. No.** | **Name of the Program** | **Name of the Course** | **Course Outcome** |
| 1 | **M. Pharm. I Year II Sem** | **ADVANCED DRUG DELIVERY SYSTEMS** | Students will know the fabrication, design, evaluation and application of above drug delivery systems. |
| 2 | **INDUSTRIAL PHARMACY** | The students will explain the machinery involved in milling, mixing, filteration,  drying and packing material constructions used in the production of pharmaceutical materials. They also learn salient features of GMP, TQM applicable in industry. They also understand the effluent treatments and prevent the pollution. They also should evaluate the validation of analytical methods and processes |
| 3 | **MODERN PHARMACEUTICS - II** | students will understand the planning of pilot plant techniques used for all pharmaceutical dosage forms such as tablets, capsules, parenterals, aerosols, cosmetics and neutraceuticals. |
| 4 | **STABILITY OF DRUGS AND DOSAGE FORMS** | The students should describe the evaluation of stability of solutions, solids, and formulations against adverse conditions. The students should be able to suggest the measures to retain stability and storage conditions for retaining the efficacy of the products. |
| 5 | **CLINICAL RESEARCH AND PHARMACOVIGILANCE** | Upon completion of the course, the student shall be able to,  Explain the regulatory requirements for conducting clinical trial  Demonstrate the types of clinical trial designs  Explain the responsibilities of key players involved in clinical trials  Execute safety monitoring, reporting and close-out activities  Explain the principles of Pharmacovigilance  Detect new adverse drug reactions and their assessment  Perform the adverse drug reaction reporting systems and communication in  pharmacovigilance |